## CA2KN31L7

TeSys K control relay - 3 NO + 1 NC - <= 690 V - 200 V AC coil



Main	
Range	TeSys
Product name	TeSys CAK
Product or component type	Control relay
Device short name	CA2K
Contactor application	Control circuit
Utilisation category	AC-15 DC-13
Pole contact composition	3 NO + 1 NC
[Ue] rated operational voltage	<= 690 V <= 400 Hz
Control circuit type	AC 50/60 Hz
Control circuit voltage	200 V AC 50/60 Hz

Complementary

Irms rated making capacity  110 A conforming to IEC 60947  Associated fuse rating  10 A gG conforming to IEC 60947  600 V conforming to IEC 60947  600 V conforming to IEC 60947  600 V conforming to SA C222 No 14 690 V conforming to VED 110 group C 690 V conforming to VED 110 group C 690 V conforming to IEC 60947  Mounting support  Plate Rail  Connections - terminals  Screw clamp terminals 2 cable(s) 0.341.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.341.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver flat 0 6 mm  Control circuit voltage limits  0.81.15 Lic at 50 °C operational 0.20.75 Lic at 50 °C operational A NC obsing 1020 ms coil energisation and NC obsing	Ith conventional free air thermal current	10 A at <= 50 °C
Associated fuse rating  10 A gG conforming to VDE 0660 10 A gG conforming to IEC 60947  600 V conforming to SS 6222 No 14 690 V conforming to DES 6222 No 14 690 V conforming to IEC 60947  Mounting support  Plate Rail  Connections - terminals  Screw clamp terminals 2 cable(s) 0.341.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.341.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid  Tightening torque  1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm  Control circuit voltage limits  0.81.15 Uc at 50 °C operational 0.20.75 Uc at 50 °C operational 0.20.75 Uc at 50 °C operational 0.20 ms coil energisation and NC closing 1020 ms coil denergisation and NC closing 1020 ms coil	[Ith] conventional free air thermal current	
[UI] rated insulation voltage  600 V conforming to CSA C22.2 No 14 690 V conforming to SSA C22.2 No 14 750 V conforming to SSA 244 750 V conforming to IEC 60947  Mounting support  Plate Rail  Connections - terminals  Screw clamp terminals 2 cable(s) 0.341.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.341.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm  Control circuit voltage limits  0.81.15 Uc at 50 °C operational 0.20.75 Uc at 50 °C drop-out  Operating time  515 ms coil denergisation and NC opening 1525 ms coil denergisation and NC opening 1020 ms coil denergisation and NO opening 1020 ms coil denergisation and		
[UI] rated insulation voltage  600 V conforming to CSA C22.2 No 14 690 V conforming to BS 5424 750 V conforming to DE 0110 group C 690 V conforming to IEC 60947  Mounting support  Plate Rail  Connections - terminals  Screw clamp terminals 2 cable(s) 0.341.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.341.5 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with cable e	Associated fuse rating	
Rail  Connections - terminals  Screw clamp terminals 2 cable(s) 0.341.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.341.5 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with outless tiple reminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with outless flexible - with outless flexible - with outless able to sell end of screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: flexible - with outless flexible -	[Ui] rated insulation voltage	600 V conforming to CSA C22.2 No 14 690 V conforming to BS 5424 750 V conforming to VDE 0110 group C
out cable end Screw clamp terminals 1 cable(s) 0.341.5 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: solid Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm  Control circuit voltage limits  0.8115 Uc at 50 °C operational 20.75 Uc at 50 °C operational 20.75 Uc at 50 °C drop-out  Operating time  515 ms coil energisation and NC opening 1525 ms coil de-energisation and NC closing 1020 ms coil de-energisation and NO opening  Mechanical durability  10 Mcycles  Operating rate  10000 cyc/h  Immunity to microbreaks  2 ms  Inrush power in VA  30 VA at 20 °C  Hold-in power consumption in VA  4.5 VA at 20 °C  Heat dissipation  1.3 W  Minimum switching voltage  17 V  Minimum switching current  5 mA  No overlap distance  0.5 mm	Mounting support	
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Operating time  515 ms coil energisation and NC opening 1525 ms coil de-energisation and NC closing 1020 ms coil energisation and NO opening Mechanical durability  10 Mcycles  Operating rate  10000 cyc/h  Immunity to microbreaks  2 ms  Inrush power in VA  30 VA at 20 °C  Hold-in power consumption in VA  4.5 VA at 20 °C  Heat dissipation  1.3 W  Minimum switching voltage  17 V  Minimum switching current  5 mA  Non overlap distance  0.5 mm	Tightening torque	
1525 ms coil de-energisation and NC closing 1020 ms coil energisation and NO opening  Mechanical durability 10 Mcycles Operating rate 10000 cyc/h Immunity to microbreaks 2 ms Inrush power in VA 30 VA at 20 °C Hold-in power consumption in VA 4.5 VA at 20 °C Heat dissipation 1.3 W Minimum switching voltage 17 V Minimum switching current 5 mA Non overlap distance 1525 ms coil de-energisation and NC closing 1020 ms coil energisation and NC opening 1020 ms coil de-energisation and NC ope	Control circuit voltage limits	
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Inrush power in VA 30 VA at 20 °C Hold-in power consumption in VA 4.5 VA at 20 °C Heat dissipation 1.3 W Minimum switching voltage 17 V Minimum switching current 5 mA Non overlap distance 0.5 mm	Operating rate	10000 cyc/h
Hold-in power consumption in VA  4.5 VA at 20 °C  Heat dissipation  1.3 W  Minimum switching voltage  17 V  Minimum switching current  5 mA  Non overlap distance  0.5 mm	Immunity to microbreaks	2 ms
Heat dissipation 1.3 W Minimum switching voltage 17 V Minimum switching current 5 mA Non overlap distance 0.5 mm	Inrush power in VA	30 VA at 20 °C
Minimum switching voltage 17 V Minimum switching current 5 mA Non overlap distance 0.5 mm	Hold-in power consumption in VA	4.5 VA at 20 °C
Minimum switching voltage 17 V Minimum switching current 5 mA Non overlap distance 0.5 mm	Heat dissipation	1.3 W
Non overlap distance 0.5 mm	Minimum switching voltage	17 V
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Minimum switching current	5 mA
Insulation resistance > 10 MOhm	Non overlap distance	0.5 mm
	Insulation resistance	> 10 MOhm

Height	58 mm
Width	45 mm
Depth	57 mm
Product weight	0.18 kg
Environment	
Standards	BS 5424 IEC 60947 NF C 63-140 VDE 0660
Product certifications	CSA UL
IP degree of protection	IP2x
Protective treatment	TC conforming to IEC 60068
Ambient air temperature for operation	-2550 °C
Ambient air temperature for storage	-5080 °C
Operating altitude	2000 m without derating in temperature
Flame retardance	Requirement 2 conforming to NF F 16-102 Requirement 2 conforming to NF F 16-101 V1 conforming to UL 94

Shocks contactor closed 15 Gn for 11 ms IEC 60068-2-27

Shocks contactor open 10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor open 2 Gn, 5...300 Hz IEC 60068-2-6

Mechanical robustness